U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Southside Chattanooga Lead - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject:	**POLREP #13** **Residential Soil Removal Continues** **Southside Chattanooga Lead** **Chattanooga, TN** **Latitude: 35.0333793 Longitude: -85.3057271**
To:	Jim Mc Guire, ERRB Reg 4
From:	Perry Gaughan, On Scene Coordinator
Date:	4/8/2013
Reporting Period:	Mar 18th through April 5th, 2013

1. Introduction

1.1 Background

Site Number:	B4J4	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	8/19/2012
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	9/17/2012	**Start Date:**	9/24/2012
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Lead contaminated soil on 52 properties being removed as a time critical removal under CERCLA.

1.1.2 Site Description

The Tennessee Department of Environmental Conservation (TDEC) requested the EPA Region 4 Emergency Response and Removal Branch's (ERRB's) assistance after discovering that the lawns of one residence and potentially several more were contaminated with lead along Read Avenue near downtown Chattanooga. Initially, one resident along Read Avenue presented to the emergency room with severe fatigue and abdominal pain. Emergency room blood work indicated lead levels approaching 20 micrograms per deciliter (ug/dl) which alerted TDEC to conduct follow up assessments. TDEC requested assistance from ERRB to characterize the soil around the home and an initial assessment was conducted with SESD (Science and Ecosystem Support Division) Athens in which three homes were assessed as well as a public park and playground area at 1700 Mitchell Avenue. Ten samples were collected and two samples showed elevated lead levels exceeding 400 ppm.

1.1.2.1 Location

The Southside Chattanooga Lead Site is located along Read, Mitchell and Carr Avenues south of Main Street in Chattanooga, Hamilton County, Tennessee (Latitude: 35.0456, Longitude: -85.3097). The area is a blend of young, middle income couples who are renovating older constructed homes and low to middle income retired couples who have resided in the area for 20 plus years. The vast majority of homes were built in the early 1900's.

The Southside Chattanooga area is immediately adjacent to downtown Chattanooga and was prone to flooding during the early 1900's and prior to the development of damming and flood control measures by the Tennessee Valley Authority (TVA). Several of the homes along Read and Mitchell Avenues appear to have been built on 4-5 feet of clay fill.

1.1.2.2 Description of Threat

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In response to a request from TDEC, the EPA Region 4 ERRB with assistance from SESD Athens, conducted two follow up assessments of the Read and Mitchell Avenue area in January and April 2012. Of the 81 homes (162 front and back yards) assessed near downtown Chattanooga, 68 lawns (42 %) have lead levels exceeding 400 ppm. Lead levels range from 400 – 4000 ppm. The 4000 ppm sample was collected from a lawn along the 1600 block of Read Ave and the sample contained very dark fine material, most likely a high concentration of bag-house dust.

In addition, the Battle Academy Elementary School which neighbors the site was sampled in mid June 2012. A 20' by 20' grid was laid over the school property and 140 grids were screened using X-ray fluorescence spectroscopy (XRF). No significant lead contamination was found and all lead levels were below 55 ppm.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

March 18th thru March 22nd, 2013

On March 18th, rainfall began at approximately 0845. The crew had enough time to dismantle a small section of fence at 1723 Read and removed some overgrown shrubbery in between the fence before rainfall began.

On 3/19/13, the ERRS crew began dismantling the remaining fencing along the 1723/1725 Read property line. The back half of the fence belongs to 1725 Read, and the front half of the fence, which was very dilapidated and could not be saved, belongs to 1723 Read. The crew rolled up the fencing belonging to 1725 Read to save for later installation once removal work was completed. After receiving permission from the property owner to remove the brick sidewalk (very high concentrations of lead in soil between the brick pavers), ERRS began popping the bricks with shovels until the Ditch Witch mini excavator and loader arrived on site. Once the two pieces of equipment arrived (0845), the remaining brick pavers/sidewalk was removed. Contaminated soil between 1723 and 1721 Read was removed down to clay, approximately one foot. Once the material was pulled out from between the two homes, the equipment was no longer needed. ERRS decontaminated the equipment, and the equipment was returned to the rental company. ERRS utilized the larger excavator and skidsteer to continue removal efforts. For operational purposes, the two front yards of 1723 and 1725 Read were removed first, and then material was pulled from the shared side yards of the two properties. ERRS crew made their way to the back yard of 1725 Read and ended operations for the day.

On 3/20/13, ERRS began removing contaminated soil from the back yard of 1723 Read. Once material was removed, START collected post removal soil samples from the front and back yard of 1723, as the front and back yard of 1725 Read was not 100% complete at this point. ERRS backfilled these areas with clay and topsoil, then graded and tamped the areas.

On 3/21/13, the ERRS crew began removal at the front yard (left side of sidewalk and side yard) of 1725 Read. Some areas of contamination at this yard were as high as ~600 ppm Pb in the front, and areas along the concrete wall (far left) were over ~1,000 ppm for Pb. 5,065 ppm Pb was the highest concentration observed along the left side yard of the home. ERRS continued to pull contaminated soil along the side yard to the back of the property. Removal was completed at approximately 1130. Sod was also delivered at this time. START collected post soil samples from the front and back yard of 1725 Read. There were not enough loads of clay and topsoil remaining at the Staging Area to complete backfill of this area, so the ERRS PM purchased several loads of both clay and topsoil to complete the property. ERRS backfilled the yard with clay and topsoil and graded the area. Once grading was complete, the area was tamped. A load of crush-n-run was placed at the back yard of 1723 Read as a parking pad to replace the previously existing parking area.

On 3/22/13, the ERRS crew placed sod at 1725 and 1723 Read. After today, the site will be shut down for a week in observance of the Easter holiday. Work will commence on Monday, April 1, 2013. Residents living at 1727 Read have been notified of our return.

March 25 thru March 29th, 2013

This week was a planned shutdown week for spring break and Easter holiday as well as time for the federal continuing resolution (CR) to be passed through the House, Senate and President Obama.

March 31 thru April 6, 2013

Rainfall on 4/1/13, 4/4/13 and 4/5/13- limited to no work at the site.

On April 1st, the ERRS crew cut down a section of fence from the front yard of the 1727 Read Avenue property. Due to rainfall at the site, efforts ceased at approximately 1000 hours.

On 4/2/13, the ERRS crew began removal efforts at the back yard of 1725 Read. A small section of yard where two evergreen trees were located remained to be addressed. The ERRS crew removed the trees and contaminated soil in this location along the alley way. Once the area was backfilled with clay and topsoil, the evergreen trees were placed back in the ground. The soil was tamped and a small strip of gravel was placed adjacent to the alleyway in an effort to widen the alley where traffic was driving onto the yard. The crew also removed contaminated soil from 1727 Read. The side yard and front yard were completed on this day. The area was backfilled with clay, topsoil and the soil was tamped.

On 4/3/13, the crew continued efforts at 1727 Read by removing contaminated soil from the remaining side yard and back yard of the property. During removal efforts, a severely broken sewer line was observed at the back of the structure along the foundation. The site plumber was contacted and repaired the pipe the same day. The removal areas addressed were backfilled with clay and covered with straw, for topsoil to be placed the next work day. START also screened the property located at 1729 Read Avenue. Due to the size of the lot, several areas were screened. Among the areas screened at the property, the very front of the property approximately ten feet from the road had exceedances for lead, and the back third of the property had exceedances for lead. The ERRS crew utilized spray paint to spray the areas where removal will take place. The center of the parcel did not have exceedances for lead or arsenic.

On 4/4/13, there was heavy rainfall at the site. The ERRS crew ensured items at the Staging Area were secured and operations ceased for the day. START visited the local NRCS field office to inquire about historical aerial images. START will have an opportunity to review these items next week

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

2.1.2 Response Actions to Date

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

No information available at this time.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$1,550,000.00	$1,387,682.00	$162,318.00	10.47%
TAT/START	$100,000.00	$75,000.00	$25,000.00	25.00%
Intramural Costs				
Total Site Costs	$1,650,000.00	$1,462,682.00	$187,318.00	11.35%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

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4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.